

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Kazutaka Haba, et al.

CASE NO.: P98,1072

SERIAL NO: 09/066,851

GROUP ART UNIT: 1742

FILING DATE: April 28, 1998

EXAMINER: S. Ip

INVENTION: "SOLDER MATERIAL"

11017 U.S. PTO
10/071320



INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner of Patents and Trademarks
Washington, D.C. 20231

S I R:

Submitted herewith is an Information Disclosure Statement for consideration in the above-identified application. This Information Disclosure Statement is submitted:

- ☐ Within three months (1) of filing date of a national application; (2) of date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application; or (3) before the mailing date of a first Office Action on the merits, whichever occurs last. (No fee is required.)
- ☒ After the mailing date of a first Office Action but before (1) mailing of a final action under 37 C.F.R. §1.113; or (2) mailing of a notice of allowance under §1.311, whichever occurs first.
 - ☐ Payment of the fee set forth in 37 C.F.R. §1.17(p) accompanies this submission; or
 - ☒ The certification specified in 37 C.F.R. §1.97(e) is made below. (No fee is required.)
- ☐ After the mailing of (1) a final action under 37 C.F.R. §1.113; or (2) notice of allowance under 37 C.F.R. §1.311 whichever occurs first, but before payment of the issue fee. The certification specified in 37 C.F.R. §1.97(e) is made below. The Commissioner hereby is petitioned to consider the Information Disclosure Statement accompanying this submission. Payment for the Petition fee set forth in 37 C.F.R. §1.17(i)(1) accompanies this submission.
- ☒ The undersigned counsel for applicant(s) hereby certifies each item of information identified in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- ☐ The undersigned counsel for applicant(s) hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, or to the knowledge of the undersigned, after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of the statement.
- ☐ A check in the amount of \$_____ to cover any required fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Account No. 08-2290. *A duplicate copy of this sheet is enclosed for this purpose.*

Very respectfully,

HILL & SIMPSON
A Professional Corporation

John W. Cornell
(Reg. No. 30,619)

John W. Cornell, Reg. No. 30,619

Hill & Simpson, P.C.
Sears Tower, 85th Floor
Chicago, Illinois 60606
Telephone: (312) 876-0200

When phoning re this application,
please call (312) 876-0200.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C 20231 on February 1, 1999.

John W. Cornell

NAME

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
INVENTORS: Kazutaka HABU; Naoko TAKEDA

ATTORNEY DOCKET NO.: 09792909-5360

SERIAL NO.: Not yet assigned

GROUP ART UNIT: Not yet assigned

FILED: February 8, 2002

EXAMINER: Not yet assigned

TITLE: "METHOD TO MANUFACTURE LEAD-FREE SOLDER
MATERIAL HAVING GOOD WETTABILITY" (as amended)



IDS REQUEST AND EXPLANATION OF RELEVANCE

Assistant Commissioner for Patents
Washington, DC 20231

S I R:

In accordance with the provisions of 37 C.F.R. § 1.56, Applicant requests that citation and examination of the references identified on the attached form PTO/SB/08A-B, copies of which are enclosed herewith in accordance with 37 C.F.R. § 1.98, be made during the course of examination of the above-referenced application for United States Letters Patent.

I. SUBMITTED U.S. PATENT DOCUMENTS

<u>Number</u>	<u>Patentee Name</u>	<u>Publication Date</u>
Not applicable		

II. SUBMITTED FOREIGN PATENT DOCUMENTS

<u>Number</u>	<u>Patentee Name</u>	<u>Publication Date</u>
JP 62-230493	Masuzawa Masao, et al.	October 9, 1987
JP 8-206874	Yamaguchi Atsushi, et al.	August 13, 1996
JP 10-6075	Niha N	January 13, 1998

WO 92/17617	KRONBERG, James W.	October 15, 1992
EP 0 612 578A1	Jin, Sungho, et al.	August 31, 1994
EP 0 847 828A1	Ogashiwa, Toshinori, et al.	June 17, 1998
EP 0 710 521A1	Ninomiya, Ryuji, et al.	May 8, 1996
EP 0 639 426A1	Kawaguchi, Toranosuke, et al.	February 22, 1995
JP 09206983	Haniyu Kazutaka	August 12, 1997

III. SUBMITTED NON-PATENT LITERATURE DOCUMENTS


Author Article Title Source Title Date Page(s) Vol./Issue Nos. Publisher
Publishing Location

Seiki Sakuyama, et al. "Solderability of Solder-Coated Surfaces for SMT Printed Wiring Boards" Fujitu-Scientific and Technical Journal, vol. 29, no. 4, 21 December 1993, pages 357-366, XP000439110

Tetsuya Nakatsuka, et al. "Development of High Reliable Pb Free Solder," Production Engineering Research Laboratory, Hitachi, Ltd. Feb. 6-7, 1997, 3rd Symposium on "Microjoining Assembly Technology in Electronics"

IV. EXPLANATION OF RELEVANCE

The above items were made of record in the parent application, U.S. Serial No. 09/066,851, filed on April 28, 1998. Copies of the above items are submitted herewith.

<p>SONNENSCHN NATH & ROSENTHAL P.O. Box 061080 Wacker Drive Station, Sears Tower Chicago, IL 60606-1080</p> <p>Attorney Customer Number: 026263 Phn: (312) 876-8000 Fax: (312) 876-7934</p>	<p>Respectfully Submitted SONNENSCHN NATH & ROSENTHAL Attorneys for Applicant</p> <p>by:  David R. Metzger Reg. No. 32,919 February 8, 2002</p>
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10/07/1320
02/08/02

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	Not yet assigned
		Filing Date	February 8, 2002
		First Named Inventor	Kazutaka HABU, et al.
		Art Unit	Not yet assigned
		Examiner Name	Not yet assigned
Sheet 1 of 2	Attorney Docket Number	9792909-5360	

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
		US-			
		US-			
		US-			
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FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		JP 62-230493	10/09/87	Masuzawa M. et al.		✓
		JP 8-206874	08/13/96	Yamaguchi, A., et al.		✓
		JP 10-6075	01/13/98	Niha, N.		✓
		WO 92/17617	10/15/92	Kronberg, J.		✓
		EP 0 612 578A1	08/31/94	Jin, S., et al.		✓
		EP 0 847828A1	06/17/98	Ogashiwa, T., et al.		✓
		EP 0 710521A1	05/08/96	Ninomiya, R., et al.		✓
		EP 0 639 426A1	02/22/95	Kawaguchi, T., et al.		✓
		JP 09206983	08/12/97	Haniyu Kazutaka		✓

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	2
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Complete if Known

Application Number	Not yet assigned
Filing Date	February 8, 2002
First Named Inventor	Kazutaka HABU, et al.
Group Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	9792909-5360

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

[illegible]

Examiner
Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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PTO 1449

37 CFR 1.501
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
IN A PATENT
(use several sheets if necessary)

Sheet 1 of 1

Docket No.
P98,1072Serial No.
09/066,851Applicant
Kazutaka Habu, et al.Filing Date
April 28, 1998Group Art Unit
174210/071320
02/08/02

U.S. PATENT DOCUMENTS

Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date If appropriate
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	AH JP 62-230493	Oct. 9, 1987	Japan				
	AI JP 8-206874	Aug. 13, 1996	Japan			X	
	AJ JP 10-6075	Jan. 13, 1998	Japan			X	
	AK					X	
	AL						

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AM	Tetsuya Nakatsuka, et al., "Development of High Reliable Pb Free Solder", Production Engineering Research Laboratory, Hitachi, Ltd., Feb. 6-7, 1997, 3 rd Symposium on "Microjoining Assembly Technology in Electronics"
AN	
AO	

Examiner

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO 1449 37 CFR 1.501 INFORMATION DISCLOSURE STATEMENT IN A PATENT (use several sheets if necessary)					Docket No. P98,1072		Serial No. 09/066,851	
					Applicant Kazutaka Habu et al.			
					Filing Date April 28, 1998		Group Art Unit 1742	
U.S. PATENT DOCUMENTS								
Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate	
	AA							
	AB							
	AC							
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AD	WO 92/17617 /	Oct 15, 1992	PCT			X	
	AE	EP 0 612 578 A1 /	Aug 31 1994	EP			X	
	AF	EP 0 847 828 A1 /	June 17, 1998	EP			X	
	AG	EP 0 710 521 A1 /	May 8, 1996	EP			X	
	AH	EP 0 639 426 A1 /	Feb 22, 1995	EP			X	
	AI	JP 09206983 (Abstract)	Aug 12, 1997	Japan			X	
	AJ							
	AK							
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
	AL	Seiki Sakuyama, et al., "Solderability of Solder-Coated Surfaces for SMT Printed Wiring Boards", Fujitsu Scientific & Technical Journal, Vol. 29, No. 4, Dec. 21, 1993, pages 357-366, XP 000439110						
	AM							
	AN							
Examiner			Date Considered					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								